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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/516,301

12/09/2004

Nobuhiro Gotou

040650

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23850

7590

01/25/2006

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EXAMINER

DOAN, JENNIFER

ART UNIT

PAPER NUMBER

2874

DATE MAILED: 01/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/516,301

Applicant(s)

GOTOU ET AL

Examiner

Jennifer Doan

Art Unit

2874

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 09 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 December 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>120904</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Information Disclosure Statement***

2. The prior art documents submitted by applicant in the Information Disclosure Statement filed on 12/09/04, have all been considered and made of record (note the attached copy of form PTO-1449).

### ***Drawings***

3. The drawings, filed on 12/09/04, are accepted.

### ***Specification***

4. Applicants' cooperation is requested in correcting any errors of which applicants may become aware in the specification.

### ***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 3 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Nakamura (U.S. 2001/0010136 A1).

With respect to claim 1, Nakamura (figures 1, 3, 4 and 8) discloses a method of distributing and laying, inside a building, optical fiber cables drawn into the building from a trunk cable, the method comprising passing the optical fiber cables through the inside of a gutter or drain pipe (abstract).

With respect to claim 3, Nakamura (figures 4 and 5) discloses the method of distributing and laying optical fiber cables, wherein a branch pipe is connected to the gutter or drain pipe, and wherein at the portion where the branch pipe is connected to the gutter or drain pipe, the optical fiber cables passed through the inside of the gutter or drain pipe are gathered at an inner side of the gutter or drain pipe opposite to the connection portion.

With respect to claim 7, Nakamura (figures 1-8) discloses the method of distributing and laying optical fiber cables, wherein a support having concavo-convex portions capable of arranging and supporting a plurality of optical fiber cables is disposed inside the gutter or drain pipe.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura (as cited above).

With respect to claim 2, Nakamura substantially discloses all the limitations of the claimed invention except Nakamura does not disclose the occupied cross-sectional area of the optical fiber cables passed through the inside of the gutter or drain pipe is

equal to or less than 50% of the cross-sectional area of the inside of the gutter or drain pipe.

However, the occupied cross-sectional area of the optical fiber cables passed through the inside of the gutter or drain pipe being equal to or less than 50% of the cross-sectional area of the inside of the gutter or drain pipe is considered to be obvious, since the efficiency of the optical signal transmission is dependent on the cross sectional area of the optical fiber cables. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the occupied cross-sectional area of the optical fiber cables passed through the inside of the gutter or drain pipe of the Nakamura's device with the value as claimed to transmit the light signal for the purpose of obtaining the highly efficient transmission of optical signal, and it also has been held that discovering an optimum value of a result effective variable involves only routine skill in the art and it is noted that the applicant does not disclose criticality in the value claimed. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980) (see MPEP § 2144.05).

10. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura (as cited above) in view of Takeji et al. (JP 11-198231).

With respect to claim 4, Nakamura substantially discloses all the limitations of the claimed invention except Nakamura does not disclose a partition plate is disposed inside the drainpipe. However, Takeji et al. (abstract) disclose a partition plate is disposed inside the drainpipe to protect the optical fiber cables. Therefore, it would have

been obvious to one having ordinary skill in the art at the time the invention was made to modify the Nakamura's device with a partition plate disposed inside the drainpipe (accordance with the teaching of Takeji et al.) for the purpose of providing more protection for the optical fiber cables.

11. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura (as cited above) in view of Sadaji et al. (JP 04-199105).

With respect to claims 5 and 6, Nakamura substantially discloses all the limitations of the claimed invention except Nakamura does not disclose a sheath tube in which the optical fiber cables are passed through. However, Sadaji et al. (figure 2 and the abstract) disclose a sheath tube in which the optical fiber cables are passed through to protect the optical fiber cables. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the Nakamura's device with a sheath tube for the optical fiber cables to passed through (accordance with the teaching of Sadaji et al.) for the purpose of providing more protection for the optical fiber cables.

### ***Conclusion***

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Sugihara (U.S. Patent 6,859,607) discloses an optical fiber cable is winded in spiral manner around.

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13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer Doan whose telephone number is (571) 272-2346. The examiner can normally be reached on Monday to Thursday from 6:00 am to 3:30 pm, second Friday off.

14. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernick can be reached on (571) 272-2344. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

15. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JD

January 19, 2006



**JENNIFER DOAN**  
**PRIMARY EXAMINER**